Database Tools

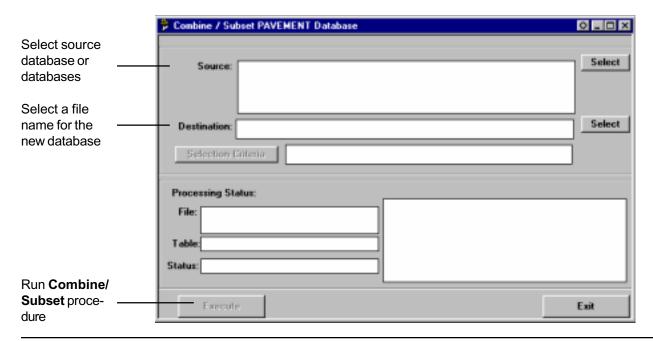
Combine/Subset Database

The **Combine/Subset** option enables you to combine multiple databases or portions of them into a single database or to separate a database into different parts based on user preferences. The **Combine** option is also useful for making a copy of a database to protect an original.

Note

It is recommended that you utilize a scratch file (a temporary working file) as the destination for all **Combine/Subset** operations. The **Combine/Subset** form has four components: source file selection, destination file specification, selection criteria and processing status. Click the **Select** button associated with the large file selection list window labeled **Source** to identify the file(s) to be combined, split, or copied. To combine databases you need to select two or more files. Select only one file if you are subsetting or copying a file. Specify the target for the combined or subset database by clicking the **Select** button associated with the window labeled **Destination**. Enter a new file name for the database that you are creating.

The **Selection Criteria** button invokes the **EMS Query Tool** to filter the source databases. For example, you can combine several databases choosing to select only those sections from the source databases that have surface type equal to AC and rank equal to P (primary). Note that the selection criteria you specify depends on the values in the first source database you select for the combine operation. For example, if the first database you select has no AC pavements, the **EMS Query Tool** can not be set to select AC as the filter for surface type.



The **Execute** button launches the **Combine/Subset** operation. The processing status area of the screen monitors the progress of your operation and posts the results. Once the operation is complete, click **Exit** to close the **Combine/Subset** form and return to the PAVER desktop. Use the **File/Open** option from the PAVER Menu to select the newly combined, subset, or copied database.

Import / Export

Note

PAVER **5.0**Import also imports export files created by 4.x versions of PAVER (e40 files).

The **Import/Export** utilities are used to exchange data between different computers running PAVER version 5.0. The database sender uses PAVER **5.0 Export** to create a single file with the extension "e50" - to signify "export, version 5.0" that can be brought into another PAVER system using PAVER **5.0 Import**. The receiver uses PAVER **5.0 Import** to transform a single file (with the extension "e50") prepared with the PAVER **5.0 Export** program, to a working pavement database in their PAVER system. This e50 file is a compilation of three separate files required to open a PAVER database. Once in the system of the receiver, the database can be opened.

5.0 Export Procedure

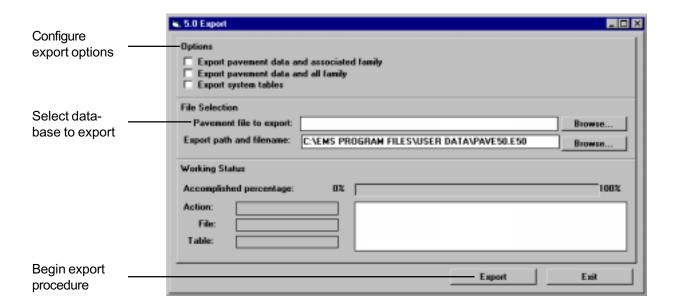
The **5.0 Export** window is divided into three sections: **Options**, **File Selection**, and **Working Status**. Export files can contain different combinations of pavement data and common data. Pavement data is accessed from the **Inventory**, **Field Inspection** and **Field Data** areas of the PAVER program. Common data is accessed from the **Tables** menu. The contents of the Export file are determined by the selection of one of three options that are located at the top of the Export form. A description of each **Export Option** follows.

- Export pavement database and associated family This creates an exported file that contains all the pavement data for the selected database and the family modeling information for any families assigned to the pavement sections within the selected database.
- Export pavement data and all family This extends the first option by adding all family models to the export file, even if they are not currently assigned to any of the exported sections. You must designate a database to export.
- Export system tables This option includes all the common PAVER data contained in the Tables menu. No pavement data is exported if only option three is selected.

Configure the **5.0 Export** file by selecting the check box next to the appropriate option. As you configure your export file, consider that the system importing the file that you are creating imports all the information in the export file unless the importing user takes special steps not to overwrite existing files. If you specify that an export file includes all system files, the person importing your file will replace their system files with the system files that you have exported.

If you have selected the first or second options, you must specify the pavement database to export. You may do this by clicking the **Browse** button in the **File Selection** area for Pavement file to export. The export file that is created will be located as indicated by the **Export path and file name selection**.

When these steps are complete, click the **Export** button located on the lower left portion of the export window. The **Working Status** portion of the export window displays the progress of the export process and indicates the completion of the export file. You may reconfigure the export options to create another export file or click the **Exit** button to leave **5.0 Export**.



5.0 Import Procedure

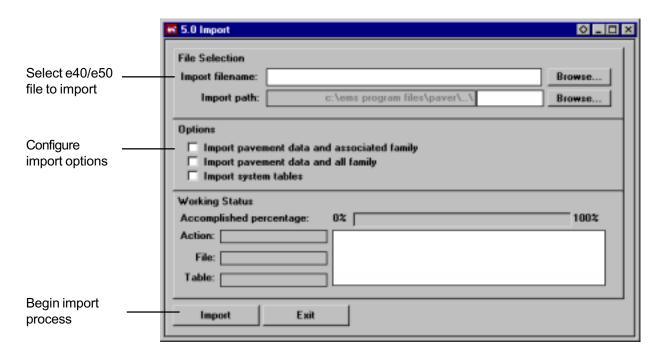
The **5.0 Import** screen is divided into three sections, **File Selection**, **Options** and **Working Status**. In **File Selection**, click the **Browse** button for **Import file name** to specify the file to be imported. These include files with the formats e50 as well as e40. Select the type of file, e50 or e40, that you would like to import. Select the file. A second **Browse** button is associated with the **Import path**. The **Import path** refers to the location and name you wish to assign to the pavement data that is to be imported. When you identify an e50 file for a database under the **Import file name** selection, the default name for the database is placed in the **Import path box**. Clicking the **Browse** button associated with the **Import path** opens the **Open/Create Pavement Subdirectory** form. You can edit this form to change the default selection. The form shows the default path to your pavement databases and provides a pick list of your existing pavement databases. You can select an existing database (in which case the data you are importing overwrites the existing database) or type in a new name, and the import file is be copied to this new name.

The **Options** portion of the **5.0 Import** window shows the data included in the import file. These items are not user adjustable. If the first check box, **Import pavement database and associated family**, is checked, the import file includes only pavement data and the families that are assigned to those pavements. Unless you already have a pavement database with the same name as the imported database, none of your current data will be overwritten when you import this data.

Unlike the first option, **Import pavement data and all family** and **Import system tables** overwrites a portion or all of your PAVER system tables. The PAVER system tables are the data contained in the various data tables that are used to configure your work plan report, data entry pick lists, units and family models. Unless you wish to replace your current system tables with the system tables from another PAVER system, do not import them.

Clicking on the **Import** button launches the import routine. If the import routine does not cause any existing data to be overwritten, the import procedure will proceed uninterrupted. If the import routine is configured such that it will overwrite existing data (either pavement data or system data) a Windows message box appears and presents you with three options: Abort to skip this file, Retry to overwrite the current file, and Ignore to overwrite all files. Select the appropriate choice.

When the import procedure is completed the PAVER status window shows a "Done" message. Click the **Exit** button to leave the **5.0 Import** Window. The data you imported can be opened by choosing **File**... **Open** from the PAVER Menu. Select the imported database from the list of available PAVER databases.



Database Verification Tools

This utility is used to perform a check of database components to see if there are any identifiable problems. This is not intended to be a comprehensive troubleshooting tool, but it is a good place to start when you encounter errors with PAVER. Each checkbox represents a separate segment of the verification process. A brief description of each follows:

- Remove Duplicate Family to Section Assignments Only one family model is assigned to a section. If two or more are assigned, it follows the instructions given in the "Family Assignment" selection box to the right. You can specify that PAVER use the last non-default family or restore the default model.
- **Verify Section Construction History** The LCD (Last Construction Date) must agree with data in the Work History table.
- **Verify / Reset Latest Inspection Indicators** The last inspection date and corresponding PCI must be properly displayed with the section inventory information (checks data against inspection data).
- Verify Distresses and Recalculate Conditions for all Sections This ensures that there are no unidentifiable distresses or zero quantity distress information and recalculates the PCI (last inspection date).
- **Verify Duplicate Major M&R** No two records should have Major M&R activity listed for the same date in the Work History tab
- Verify Work (Required/History) Descriptions All data in fields where input is restricted to drop lists must be valid data.

When the verification is complete, the utility produces a list of exceptions and corresponding sections. You can print the table, sort it, or export it to Microsoft Excel. To export, click with the right mouse button on the table to access these options. The **Print** button at the bottom of the window prints the table directly.

